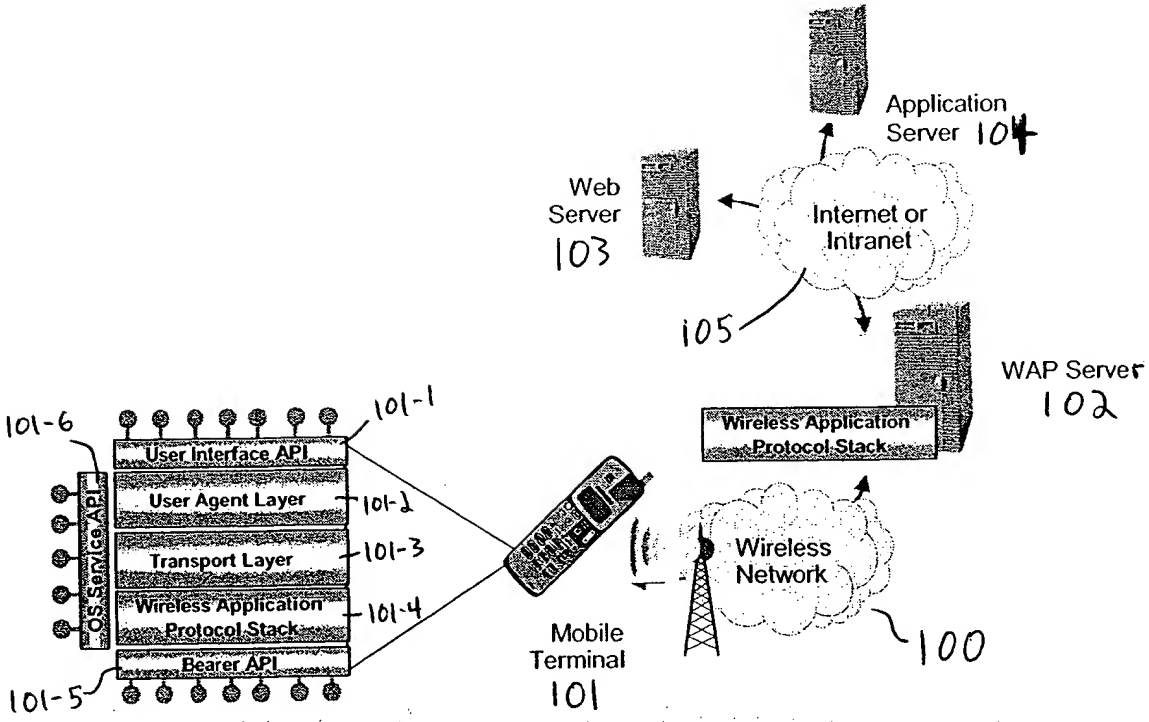

Application Server 104
Web Server 103
Internet or Intranet
105
WAP Server 102
Wireless Application Protocol Stack
Wireless Network
100
Mobile Terminal 101
101-1
101-2
101-3
101-4
101-5
101-6
User Interface API
User Agent Layer
Transport Layer
Wireless Application Protocol Stack
Bearer API
OS Service API

Fig. 1

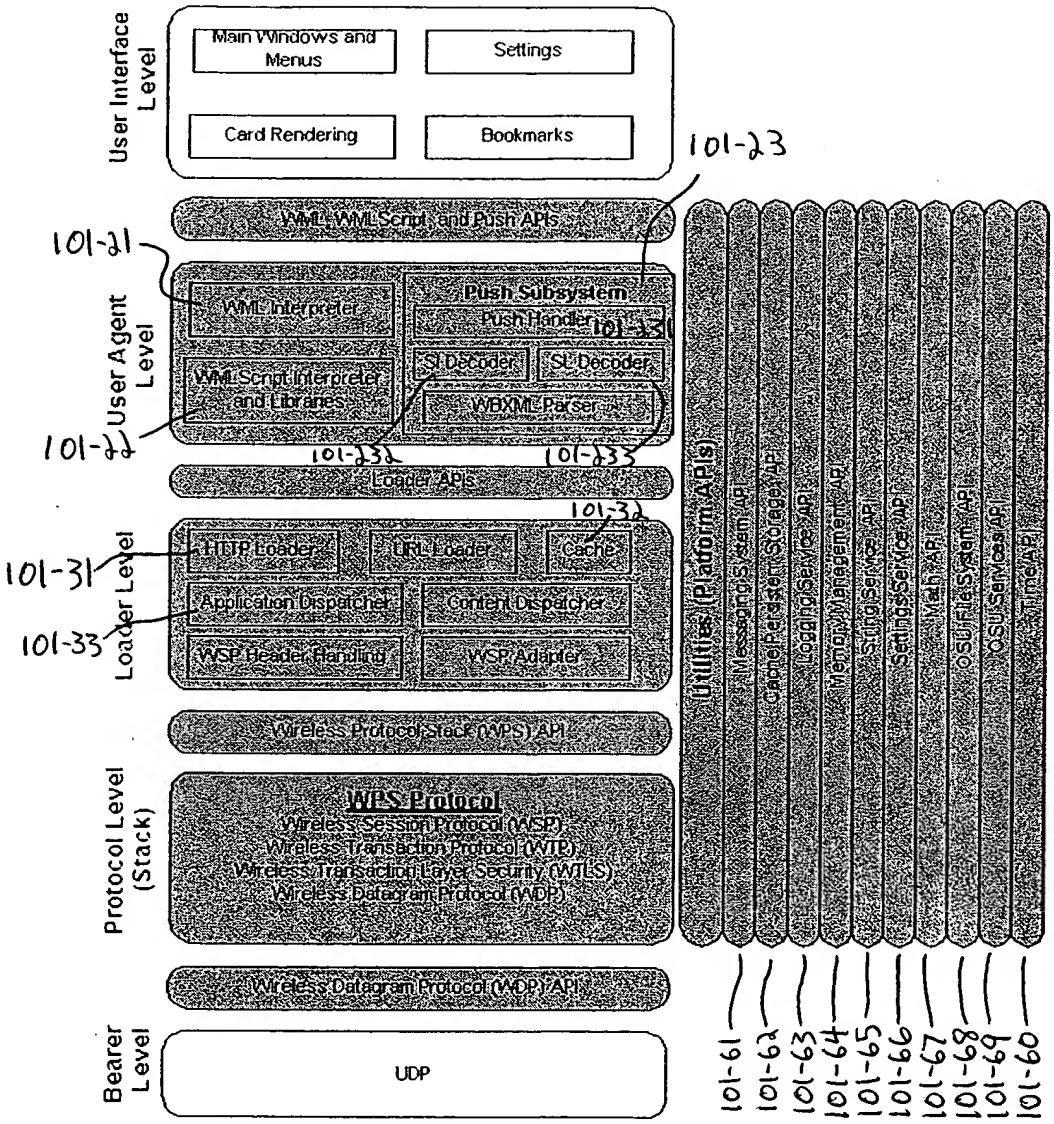

User Interface Level
Main Windows and Menus
Settings
Card Rendering
Bookmarks
101-23
WML, WML Script, and Push APIs
101-21
User Agent Level
WML Interpreter
Push Subsystem
Push Handler
101-35
WML Script Interpreter and Libraries
SI Decoder
SL Decoder
WBXML Parser
101-22
101-34
101-36
Loader APIs
101-32
Loader Level
101-31
HTTP Loader
URL Loader
Cache
101-33
Application Dispatcher
Content Dispatcher
WSP Header Handling
WSP Adapter
Wireless Protocol Stack (WPS) API
Protocol Level (Stack)
WPS Protocol
Wireless Session Protocol (WSP)
Wireless Transaction Protocol (WTP)
Wireless Transaction Layer Security (WTLS)
Wireless Datagram Protocol (WDP)
Wireless Datagram Protocol (WDP) API
Bearer Level
UDP
Utilities (Platform APIs)
MessagingSystem API
CachePersistentStorage API
LoggingService API
MemoryManagement API
StringService API
SettingsService API
Math API
OSUFileSystem APIs
OSUServices API
OSUTimer API
101-61
101-62
101-63
101-64
101-65
101-66
101-67
101-68
101-69
101-60

Fig. 2

00621T "mTOSZ60

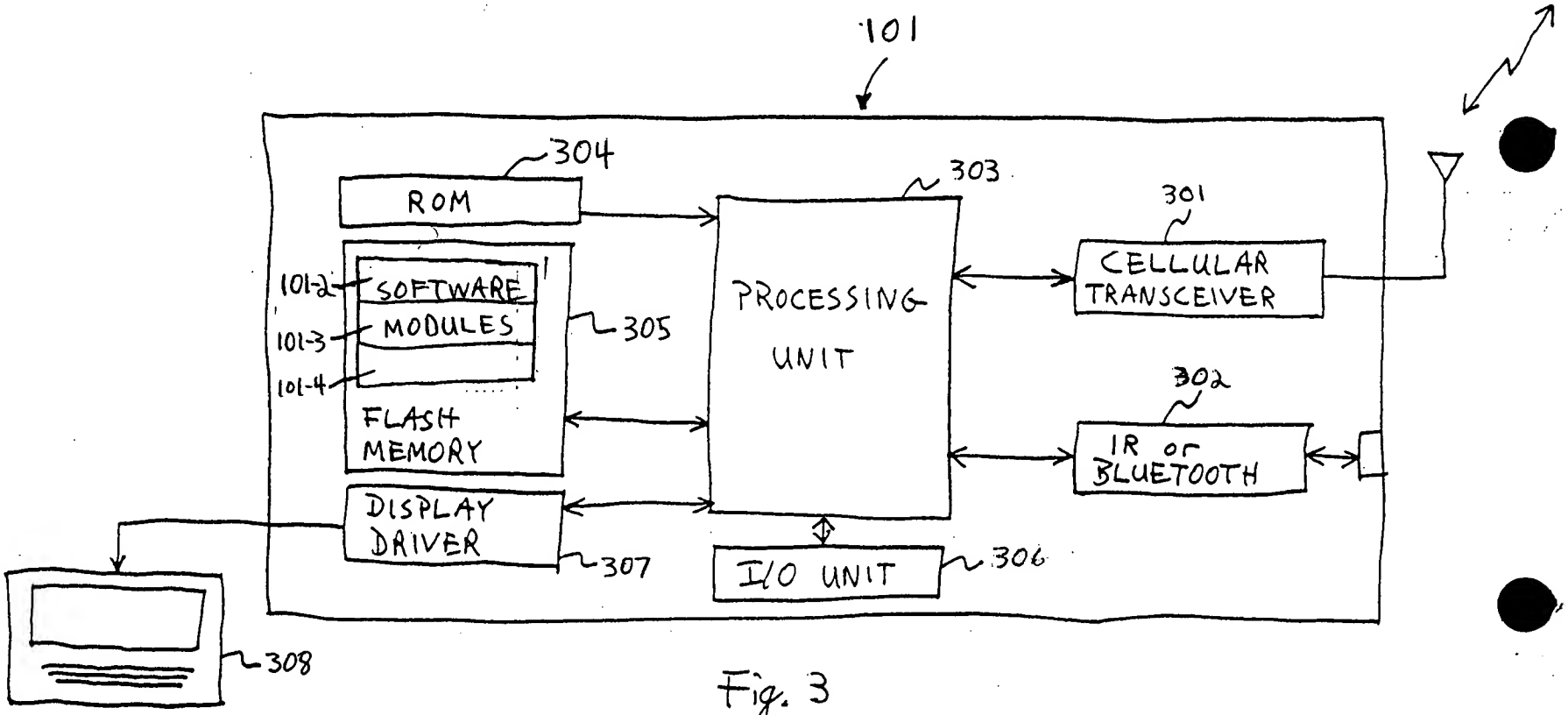


Fig. 3

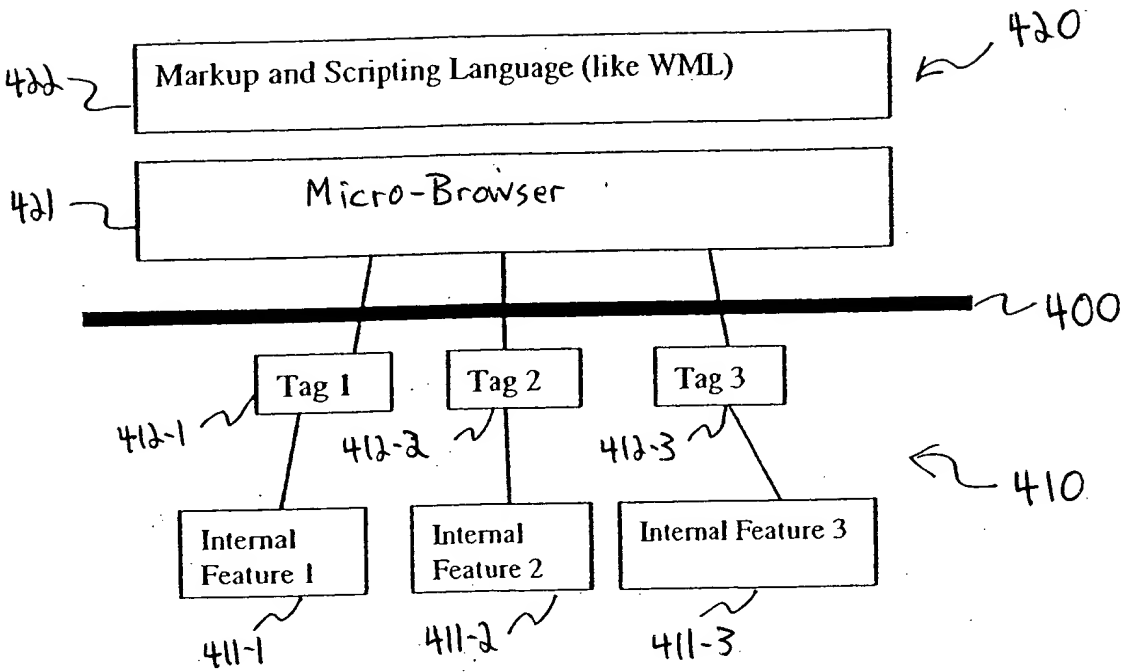

Markup and Scripting Language (like WML)
420
422
Micro-Browser
421
400
Tag 1
Tag 2
Tag 3
412-1
412-2
412-3
410
Internal Feature 1
Internal Feature 2
Internal Feature 3
411-1
411-2
411-3

Fig. 4

006227 "mF05260

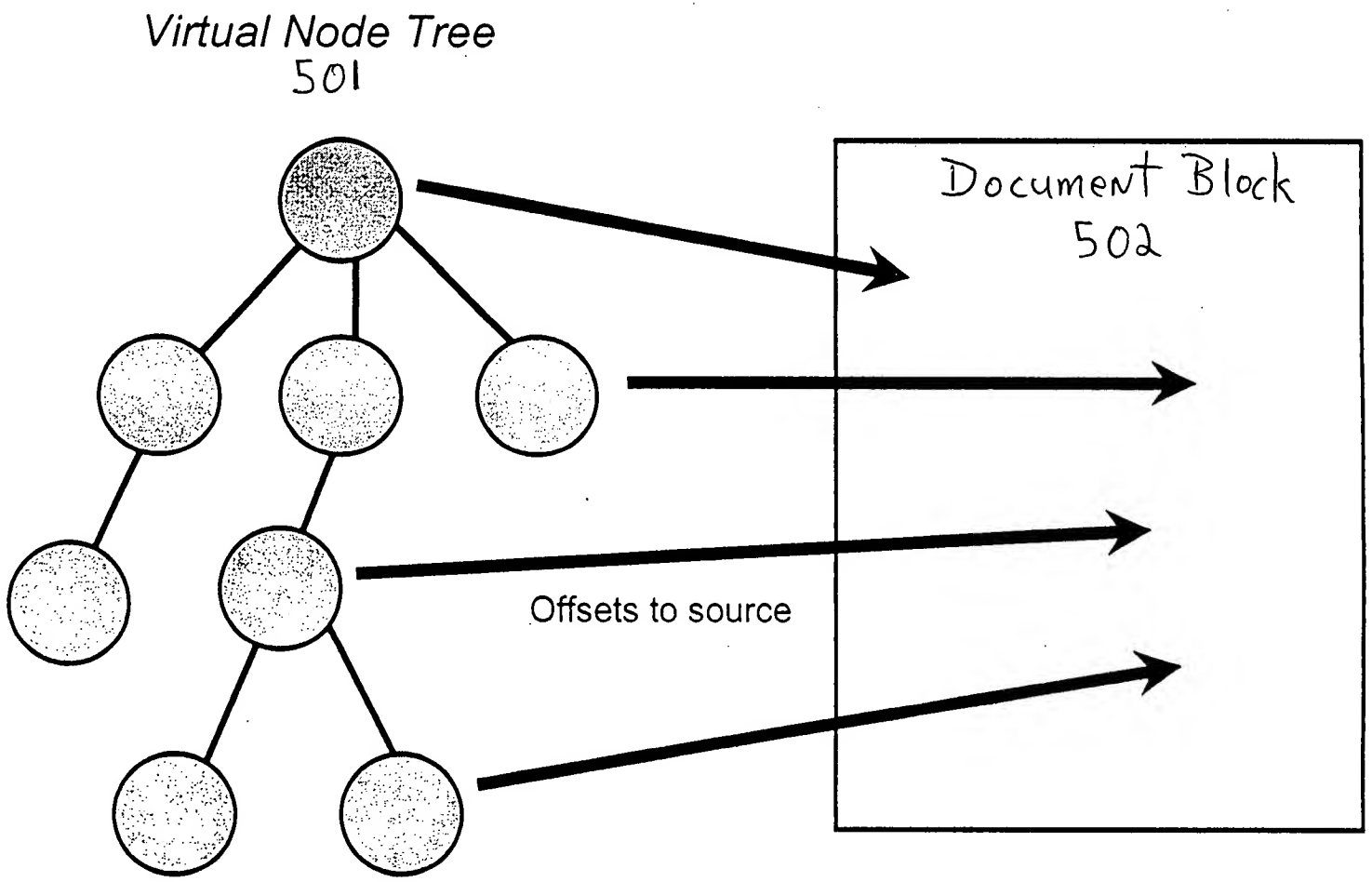
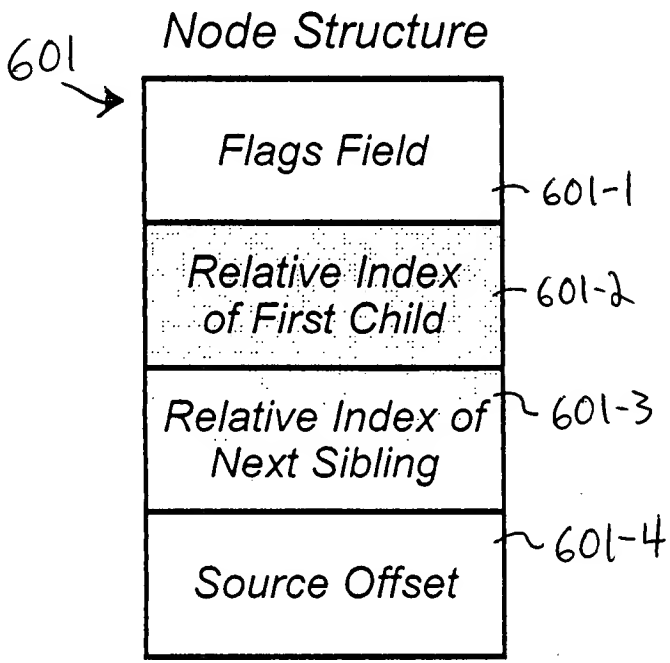
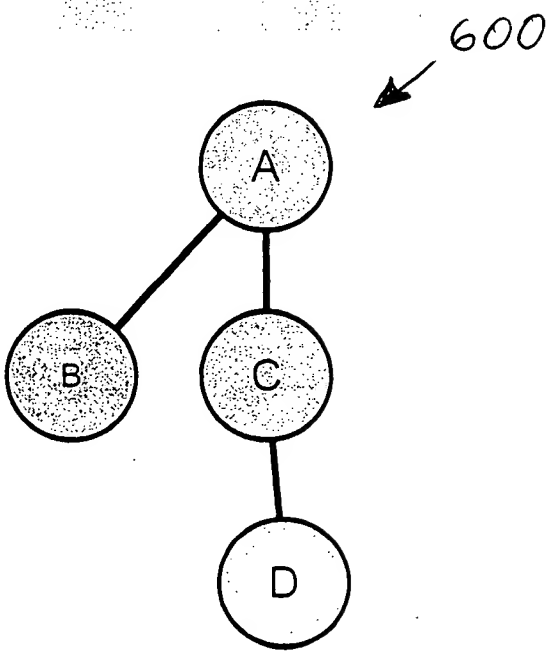


Fig. 5

D06227 "TM TOS260

Fig. 6





Compact Tree Description Block 603

Node A				Node B				Node C				Node D			
	+1	0			0	1		LC	1	-2		LC	0	-1	

LC = Last Child Flag Set

006227 "mT05260

Compact Tree Description Block 703

"wml" node (root)				"card" node				"text" node				"card" node			
	+1	0	0		+1	+2	5	*LC*	0	-1	22	*LC*	+1	-3	44

"text" node				"do" node				"prev" node			
	0	+1	61	*LC*	+1	-2	78	*LC*	0	-1	96

Document Block 702

```
<wml><card id="card1">Welcome to WML</card>
<card id="card2">Compact tree demo<do type
="prev"><prev/></do></card></wml>
```

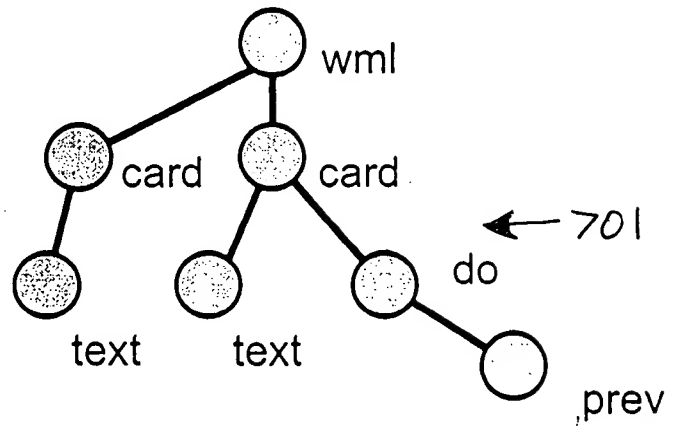


Fig. 7

006227 "nT05260

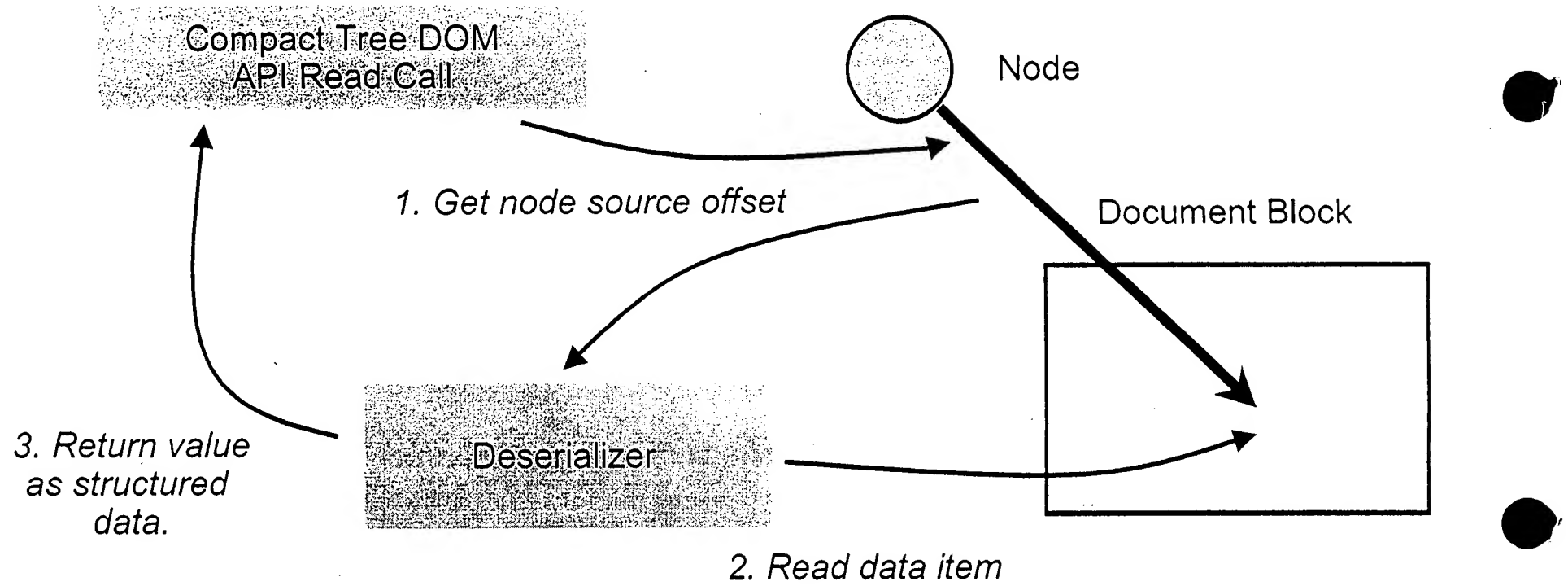


Fig. 8

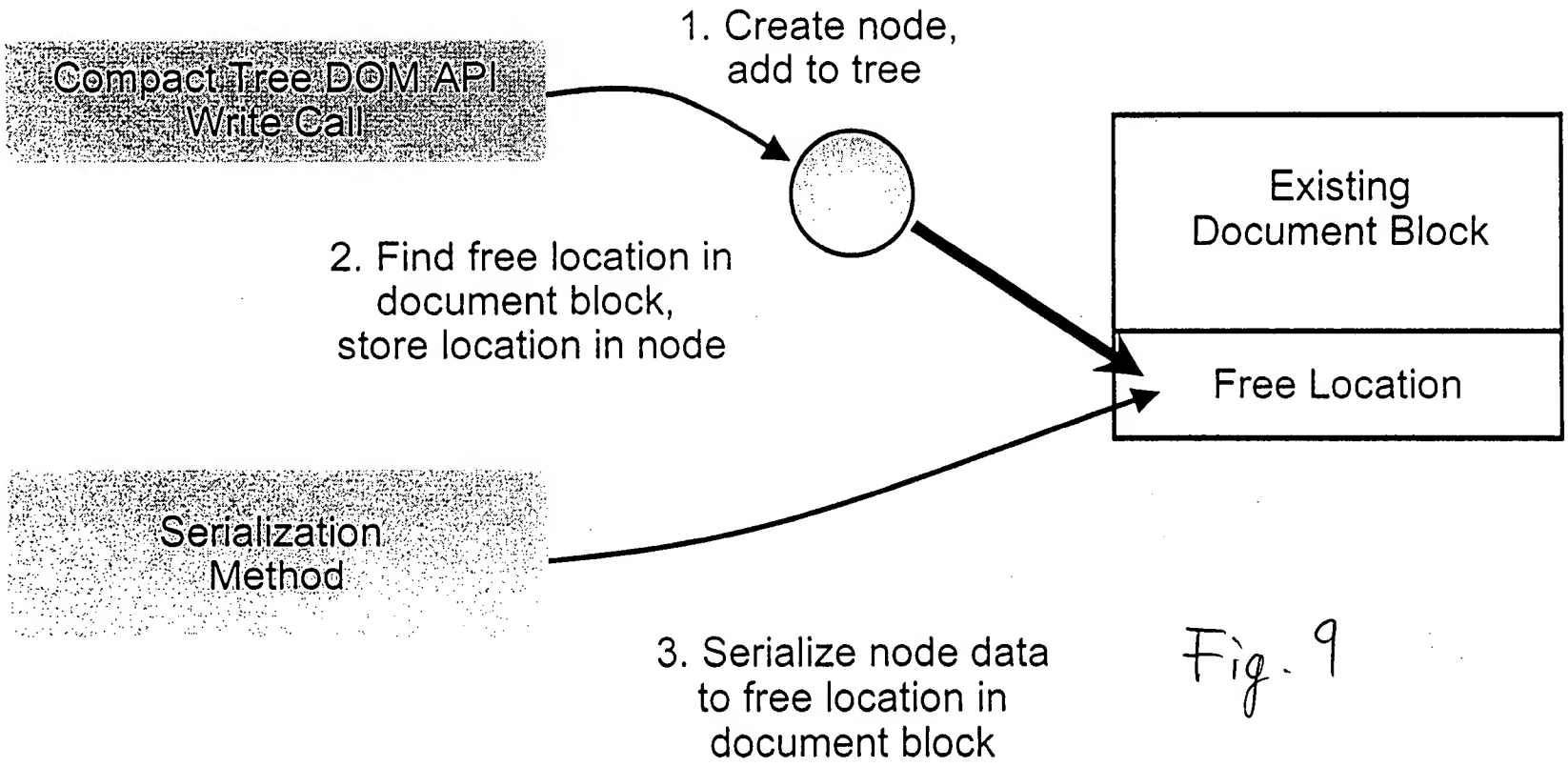

Compact Tree DOM API Write Call
1. Create node, add to tree
2. Find free location in document block, store location in node
Existing Document Block
Free Location
Serialization Method
3. Serialize node data to free location in document block

Fig. 9